

M 5.9, 52 km SW of Caete, Chile
Origin Time: 2023-12-24 03:23:42 UTC (Sat 22:23:42 local)
Location: 38.0756° S 73.8819° W Depth: 11.8 km

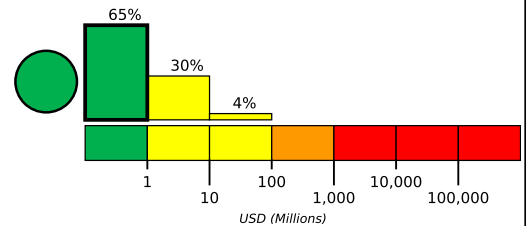
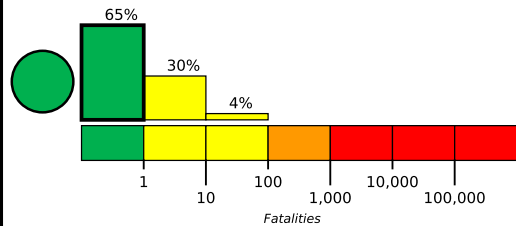
PAGER Version 2

Created: 2 hours, 5 minutes after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses

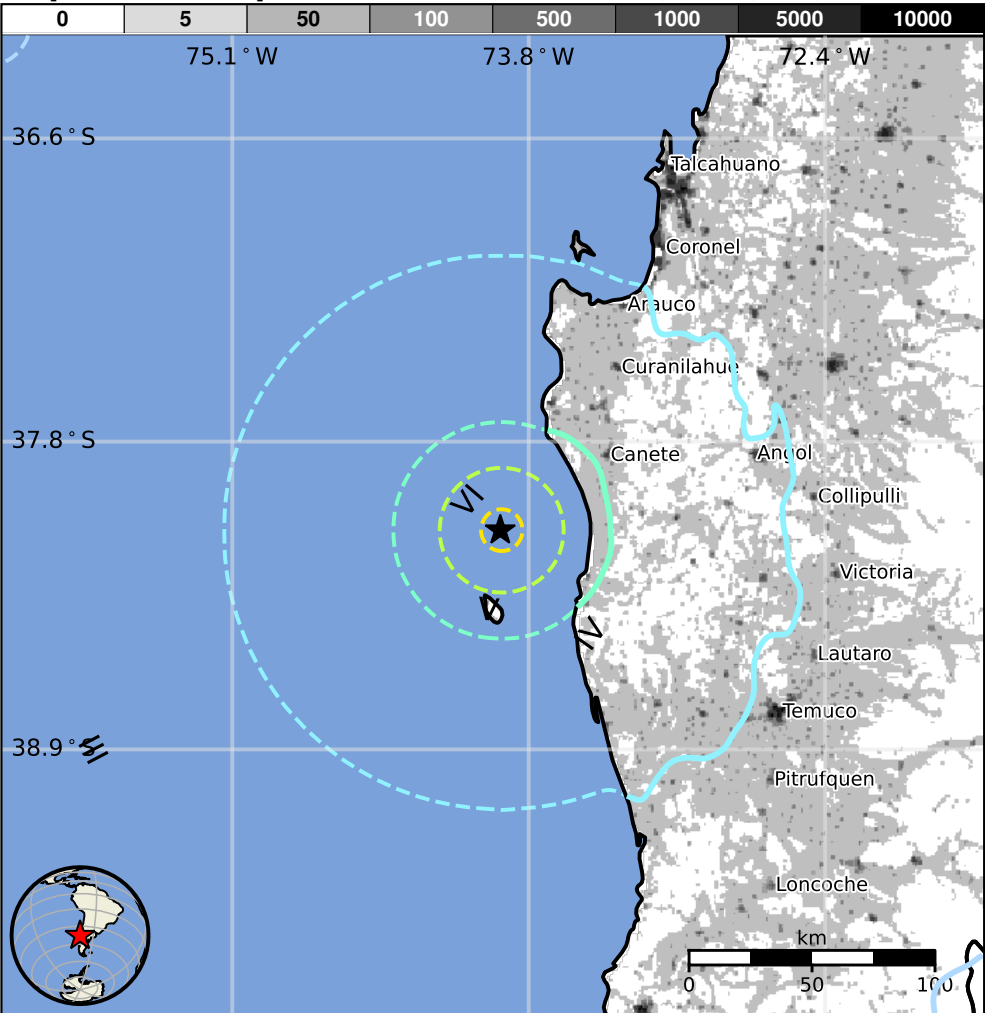


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		—*	2,881k*	465k	17k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are adobe block and rubble/field stone masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1998-04-01	278	6.7	V(284k)	—
1960-05-22	76	9.6	IX(227k)	—
1960-05-22	76	9.6	IX(227k)	0

Selected City Exposure

MMI	City	Population
IV	Canete	20k
IV	Lebu	22k
IV	Curanilahue	31k
IV	Carahue	12k
IV	Arauco	25k
IV	Angol	45k
III	Temuco	238k
III	Concepcion	215k
III	Talcahuano	253k
III	Valdivia	133k
III	Chillan	150k

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/us7000116h#pager>

bold cities appear on map.

(k = x1000)

Event ID: us7000116h